

# Psychological Monographs

General and Applied

No. 401  
1955

Robert Lee Decker

A Study of Three Specific Problems in  
the Measurement and Interpretation  
of Employee Attitudes

By

Robert Lee Decker

*Carnegie Institute of Technology*

Vol. 69  
No. 16

Price \$1.00



Edited by Herbert S. Conrad  
Published by The American Psychological Association, Inc.

# Psychological Monographs: General and Applied

*Combining the Applied Psychology Monographs and the Archives of Psychology  
with the Psychological Monographs*

## Editor

HERBERT S. CONRAD

*Department of Health, Education, and Welfare  
Office of Education  
Washington 25, D.C.*

## Managing Editor

LORRAINE BOUTHILET

## Consulting Editors

DONALD E. BAIER

FRANK A. BEACH

ROBERT G. BENNEUTER

WILLIAM A. BROWNELL

HAROLD E. BURTT

JERRY W. CARTER, JR.

CLYDE H. COGNES

JOHN F. DASHIELL

EUGENIA HANFMANN

EDNA HEIDREICHER

HAROLD E. JONES

DONALD W. MACKINNON

LORRIN A. RIGGS

CARL R. ROGERS

SAUL ROSENZWEIG

ROSS STAGNER

PERCIVAL M. SYMONDS

JOSEPH TIFFIN

LEDYARD R. TUCKER

JOSEPH ZUBIN

MANUSCRIPTS should be sent to the Editor.

Because of lack of space, the *Psychological Monographs* can print only the original or advanced contribution of the author. *Background and bibliographic materials must, in general, be totally excluded* or kept to an irreducible minimum. Statistical tables should be used to present only the most important of the statistical data or evidence.

The first page of the manuscript should contain the title of the paper, the author's name, and his institutional connection (or his city of residence). Acknowledgments should be kept brief, and appear as a footnote on the first page. No table of contents need be included. For other directions or suggestions on the preparation of manuscripts, see: CONRAD, H. S. Preparation of manuscripts for publication as monographs. *J. Psychol.*, 1948, 26, 447-459.

CORRESPONDENCE CONCERNING BUSINESS MATTERS (such as author's fees, subscriptions and sales, change of address, etc.) should be addressed to the American Psychological Association, Inc., 1535 Sixteenth St. N.W., Washington 6, D.C. Address changes must arrive by the 15th of the month to take effect the following month. Undelivered copies resulting from address changes will not be replaced; subscribers should notify the post office that they will guarantee third-class forwarding postage.

COPYRIGHT, 1955, BY THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.

## Psychological Monographs: General and Applied

A Study of Three Specific Problems in the Measurement and Interpretation of Employee Attitudes<sup>1</sup>

Robert Lee Decker

Carnegie Institute of Technology<sup>2</sup>

## I. INTRODUCTION

OUT of the numerous efforts to analyze and interpret the causal factors in industrial conflicts between management and labor has come a relatively new approach on the part of many managers—an attempt to see the employee as an individual, to understand his needs, hopes, expectations, and fears as a single human being (19, 20, 27).

As the proposition that industrial conflict is the result of frustration of individual needs, whether biological or social in origin, has been accepted, the next logical step has been to develop a means for locating and defining these needs and communicating them to the employers. The job satisfaction questionnaire has partially provided this means. It has as its purpose the locating and communicating of employee needs in order that adjustments may be made which will avoid open conflict. The measurement of job satisfaction is, in the final analysis, the measurement of an attitude or a combination of attitudes.

<sup>1</sup>Based on a thesis in partial fulfillment of the requirements for the degree of Doctor of Philosophy, Department of Psychology and Education, Graduate School of the Carnegie Institute of Technology. The author is indebted to Dr. Duane C. Shaw, chairman of his graduate committee, for his guidance and suggestions.

<sup>2</sup>Now a member of the staff of the Department of Philosophy and Psychology at West Virginia University.

The techniques in use today are based upon the methods and theories developed by such pioneers as Thurstone (29, 30), Likert (16), *et al.*

*The Problems*

The present investigation is concerned with three specific problems related to the concept of job satisfaction as well as to the general problem of attitude measurement. The following is an introductory statement of each of the three problems.

Problem I, *Weighted vs. Unweighted Job Satisfaction Indices*, deals specifically with the problem of measurement of job attitudes. It is based upon the tentative theory suggested by Hoppock's (8) definition of job satisfaction, which implies that the general over-all attitude toward the job may result from a combination of satisfactions and dissatisfactions which the employee feels toward the specific aspects of his job. The specific job aspects may include the pay, the supervision, the physical working conditions, the security offered by the job, and many other factors.

On the basis of this hypothesis it should be possible to determine an individual's general attitude toward his job by combining measures of his attitudes toward the specific aspects of his job in the proper manner. The procedure for Problem I is designed to test

possible methods of combining these specific attitudes to arrive at a more meaningful attitude measure for the individual. The procedure will involve the weighting of the attitudes toward the specific job aspects according to the relative amount of importance each of the job factors has to the employee. It is hypothesized that this combination weighted by importance values will be a closer estimate of the over-all attitude of the subject than an unweighted average of measures of his specific attitudes.

Problem II, *The Relationship Between Dissatisfaction With and Importance of Specific Job Aspects*, is designed to explore some of the dynamics which may be involved in the amount of importance which is attached to a given job aspect by an individual. There have been many attempts to develop a list of job factors which employees consider important (11, 15, 17, 23, 24, 25, 26). Most of these studies have presented a list of factors in the order of their relative importance to employees. Although there is a certain amount of general agreement as to what the factors are, it is difficult to find two studies which report the same order of relative importance for the job factors. For example, in one situation pay may rank high in importance, while in another situation, or group of employees, pay may be near the bottom of the list. The hypothesis of the present investigation is that the degree of importance attached to a given job aspect will be a function of the degree of dissatisfaction which is felt toward that job aspect. It is hypothesized that as dissatisfaction increases, there will be a corresponding increase in importance of the job aspect involved.

Problem III, *The Extremeness of Attitude and the Variability of Response*, is related to general attitude theory. It

arises from reports such as those of Allport and Hartman (1) and Cantril (2), which conclude that as an attitude becomes more extreme in either the favorable or the unfavorable direction, there is found a corresponding increase in the degree of intensity with which that attitude is held. Katz (12) was able to show, in addition, that a measure of intensity of an attitude increased ability to predict behavior in situations related to that attitude. The hypothesis of the present study is that the more extreme the over-all attitude, the less variable will be the responses of the individual to specific questions which are related in some way to the general attitude. In other words, it may be predicted that the employee who expresses extreme satisfaction or extreme dissatisfaction with his job in general will be more consistent in his expression of attitude toward specific aspects of his job than the individual who has balanced feelings of satisfaction and dissatisfaction.

## II. GENERAL PROCEDURE

The data for the present study were secured by means of a questionnaire constructed for that purpose. The questionnaire was composed of five separate sections mimeographed on  $8\frac{1}{2} \times 15$  bond paper and stapled in booklet form. The five sections of the questionnaire were as follows:

Section A. A nine-point scale on which the employee rated his general over-all attitude toward his job (see Scale I). The subject was asked to select the statement on the scale which most nearly represented his attitude.

Section B. Ratings on a nine-point scale of satisfaction or dissatisfaction with each of ten specific job aspects (see Scale II). The ten job aspects studied were the following:

1. Amount of pay received.
2. Job security.
3. Physical working conditions.
4. Opportunities for advancement.
5. Company's reputation with the public.
6. Company's general attitude toward employees.
7. Personality and temperament of immediate supervisor.
8. Employee eating facilities.
9. Knowledge of the company's finances.
10. The way informed of job performance.

References such as Raube (23), Jurgensen (11), and Lindahl (17) were used as guides for the selection of factors or job aspects to be studied. Each job aspect was referred to in the questionnaire in a question such as, "How do you feel about the amount of pay you receive on your present job?" The employee was asked to indicate his feelings on the nine-point scale (Scale II).

#### Section C. A paired-comparisons scale

##### SCALE I

###### Scale for Rating Over-all Job Attitude

1. ( ) *Completely Satisfied*: I feel that my present job offers me everything I could reasonably desire.
2. ( ) *Very Satisfied*: I like my job very much and feel that there are few places in which I could do better.
3. ( ) *Quite Satisfied*: I like my job reasonably well—I have no real complaints.
4. ( ) *Fairly Satisfied*: I am fairly satisfied with my job—there are a few things I don't like about it but I'm still a little more satisfied than dissatisfied.
5. ( ) *Balanced Feelings*: There are about as many things that I like about my job as there are that I dislike—my feelings are about equal in both directions.
6. ( ) *Slightly Dissatisfied*: I tend to be a little more dissatisfied than satisfied with my job.
7. ( ) *Quite Dissatisfied*: I'm displeased with my job—I probably won't quit but I'm definitely not satisfied.
8. ( ) *Very Dissatisfied*: I am very displeased with my job—there have been times when I've thought of getting another.
9. ( ) *Extremely Dissatisfied*: I am extremely dissatisfied with my job. I am thinking of quitting or at least of seriously looking around for another job.

##### SCALE II

###### Scale for Rating Attitudes toward Specific Job Aspects

1. ( ) *Completely Satisfied*: I couldn't reasonably desire more.
2. ( ) *Very Satisfied*: I don't think things could be improved a great deal.
3. ( ) *Quite Satisfied*: I like the situation as it is pretty well—I can't really complain.
4. ( ) *Fairly Satisfied*: Things could be better but I'm still a little more satisfied than dissatisfied.
5. ( ) *Balanced Feelings*: My feelings toward this are about equal. It's not good but it's not bad. I'm about as satisfied as dissatisfied.
6. ( ) *Slightly Dissatisfied*: I tend to be a little more dissatisfied than satisfied with this.
7. ( ) *Quite Dissatisfied*: I am definitely not satisfied with this.
8. ( ) *Very Dissatisfied*: I feel very dissatisfied with this.
9. ( ) *Extremely Dissatisfied*: I am extremely dissatisfied and displeased with this.

designed to measure the importance attached by the employee to each of the ten job aspects listed in Section B. The job aspects were paired in all possible combinations using the techniques suggested by Guilford (5). The subject was asked to check the member in each pair which was more important to him.

Section D. A five-point scale (Scale III) on which the employees rated the importance of each of the ten job aspects. Each job aspect was referred to

##### SCALE III

###### Scale for Rating Importance of Specific Job Aspects

1. ( ) *Of No Importance*: This aspect has no real importance to me.
2. ( ) *Of Little Importance*: I would be only slightly bothered or annoyed if I were not satisfied with this.
3. ( ) *Of Some Importance*: This factor is important enough that I would be fairly unhappy if not satisfied with it.
4. ( ) *Very Important*: If I were not satisfied with this I might not leave my job but I would be extremely unhappy.
5. ( ) *Extremely Important*: I would probably look for another job if I were not reasonably satisfied with this.



in a question such as, "How important to you are the opportunities for advancement offered by your job?" The employee indicated his answer by using this scale.

Section E. A paired-comparisons scale similar to that in Section C but designed to measure dissatisfaction with each of the ten job aspects under study. In each pair, the employee indicated the job aspect with which he was more dissatisfied.

#### *Subjects*

The subjects were provided by a large metropolitan department store. Twelve departments of the store with a total of 390 employees were selected for study. The objective of the selection was to provide a cross section of the company which would include both selling and nonselling employees. All subjects were regular full-time employees. No supervisory or administrative personnel were included. The administration of the questionnaire yielded 310 cases which were considered usable. (It was necessary to discard several questionnaires which were incomplete or in which directions had not been followed.)

The questionnaire was administered to the employees on company time in special rooms which were available for employee meetings. The employees were told the purpose of the meeting and were assured that all data would remain strictly anonymous. After the questionnaires had been scored, the data were recorded on IBM punch-cards to facilitate analysis.

### III. PROBLEM I: WEIGHTED VS. UNWEIGHTED JOB

#### SATISFACTION INDICES

It seems logical to assume that there are many specific factors or aspects of

a job which will determine the desirability, i.e., potential satisfaction, of that job for an individual. In addition, the person holding the job in question must consciously or unconsciously combine his attitudes toward these specific aspects, and from this combination arrive at a general attitude or feeling toward the job he holds. The assumption is implied in Hoppock's tentative definition of job satisfaction as "... any combination of psychological, physiological, and environmental circumstances that causes a person truthfully to say 'I am satisfied with my job.'" (8, p. 47).

The present study is based upon the theory that the attitudes of satisfaction or dissatisfaction toward the specific aspects of the job combine to produce the over-all feeling of satisfaction or dissatisfaction with the job in general. The hypothesis of the present investigation is that in combining to produce the over-all attitude toward the job, the attitudes toward the specific job aspects will have differential weights or influences and that these weights will be a function of the amount of importance attached to each job aspect by the employee. This approach may be considered an amplification or extension of implications resulting from studies such as those of Katz (12), Cantril (2), and Allport and Hartman (1), in which attempts to improve attitude measurements were made by including dimensions such as intensity, certainty, etc.

#### *Statistical Procedure*

The following data for 310 subjects were available for statistical treatment and analysis:

- a. A rating of over-all attitude of satisfaction or dissatisfaction on a nine-point scale (Scale I). Each rating was assigned the numerical value of its point on the scale.

b. A rating of satisfaction with each of the ten specific job aspects on a nine-point scale. Each rating was assigned the numerical value of its point on the scale (Scale II).

c. A rating of importance for each of the ten specific job aspects on a five-point scale. Each rating was assigned the numerical value of its point on the scale (Scale III).

d. Paired-comparisons scale values of importance for each of the ten job aspects. These scale values were computed separately for each of the twelve departments of the company represented by the subjects. Computation was performed by the method demonstrated by Guilford (5).

Statistical treatment of the data consisted of the following:

a. Computation of a job satisfaction index for each subject by averaging the numerical values of the ratings of satisfaction with the ten job aspects (from Section B of the questionnaire).

b. A job satisfaction index weighted by importance was then computed for each subject. This was done by multiplying the numerical value of each rating of satisfaction with the individual job aspects by the numerical value of the rating of importance given that factor (Section D of questionnaire). These weighted scores were then averaged for each subject to produce a job satisfaction index weighted by ratings of importance.

c. A second weighted job satisfaction index was computed for each subject by multiplying the ratings of satisfaction with the individual job aspects by the paired-comparisons scale values of importance (Section C). Each subject's ratings of satisfaction were multiplied by the scale values of importance for the department of which he was a member. These weighted ratings were then averaged to produce the second weighted job satisfaction index.

To determine whether or not the weighted job satisfaction indices were more accurate estimates of the over-all attitude than the unweighted indices, Pearson product-moment correlation coefficients were computed by the method suggested by Warren and Mendenhall (31) for use with IBM data and equipment. Coefficients of correlation were computed to determine the relationships between (a) the ratings of over-all satisfaction and the unweighted job satisfaction indices, (b) the over-all rating of

satisfaction and the job satisfaction indices weighted by ratings of importance, and (c) the ratings of over-all satisfaction and the job satisfaction indices weighed by paired-comparisons scale values of importance.

*Results.* The results of the statistical analysis are shown in Table 1. All coefficients of correlation were tested by the methods suggested by Garrett (4), and all were found to be significantly different from zero beyond the 1 per cent level of confidence.

Using the tests suggested by McNemar (18) for testing the significance of differences between obtained correlation coefficients for data drawn from the same sample, no significant differences were found between the coefficients of correlation (.580, .549, .589).

### Discussion

From a general observation of the conditions under which the study was made, it may be that the failure to achieve the anticipated results is due to the nature of the techniques rather than to the inaccuracy of the hypothesis. For example, it was necessary to limit the number of specific job factors which could be studied in order to make the time required to complete the questionnaire suitable for employees called off the job. In addition, the ten job aspects chosen for study did not show a wide

TABLE 1  
COEFFICIENTS OF CORRELATION BETWEEN RATINGS OF OVER-ALL SATISFACTION AND THE JOB SATISFACTION INDICES ( $N = 310$ )

Job Satisfaction Index	<i>r</i>
Unweighted average	.580
Average weighted by ratings of importance	.549
Average weighted by paired-comparisons scale value	.589

range in degree of importance to the employees. The scale of importance may not have been sensitive to very slight differences in importance. It is suggested that more elaborate procedures of weighting job factors might be developed, possibly along the lines of statistical methods such as those developed by Kolstad (13), Woods (34), and others (3, 6, 7, 21, 22). It is also desirable, however, that future research deal with the possible methods of weighting suggested by the studies of Katz (12), Allport and Hartman (1), and the present investigation.

### *Conclusions*

Under the conditions of the present investigation, the hypothesis that the weighting of attitudes toward specific job aspects by the amount of personal importance the employee attaches to them will increase the ability to predict expressions of general over-all attitude was *not* supported. When the ratings of specific satisfactions were weighted by either ratings of importance or paired-comparisons scale values of importance, there was no significant change in capacity to predict expressions of over-all attitude toward the job.

### IV. PROBLEM II: THE RELATIONSHIP BETWEEN IMPORTANCE OF, AND DISSATISFACTION WITH, SPECIFIC JOBS ASPECTS

There have been many attempts to develop a list of job aspects which are most important in determining job attitudes (11, 15, 17, 23, 24, 25, 27). Although there is some general agreement as to the job factors which are important, it is difficult to find two studies which report the job aspects in the same order of relative importance. It seems that employees differ from time to time and situation to situation as to the

amount of personal importance they attach to the various aspects of their jobs.

A new approach to the problem has been suggested by Stagner (27) and by Hoppock and Robinson (9). Stagner, in his discussion of human motivation in industry, suggests that strongest needs at the moment determine the responses of the employee when he rates the importance of the aspects of his job. Hoppock and Robinson state that employees consider most important those factors which are particularly unfavorable at the moment of questioning. "Perhaps there is a human tendency to take for granted and underate important benefits possessed, and to reappraise them upward when they are denied" (9, p. 13). The objective of the present study was to explore this possibility.

The theoretical hypothesis of the present study is that need frustration operates to increase the saliency of the need which is blocked (10). The needs of the individual which are not satisfied will occupy a position of greater importance to that individual. Empirically, it may be predicted that the factors considered most important by the employees who served as subjects would be those factors with which they were most dissatisfied.

### *Statistical Procedure*

The data for testing the hypothesis in Problem II were taken from Section C and Section E of the questionnaire. These included the results of a paired-comparisons scale which was designed to measure the importance attached to each of the ten job aspects under consideration (Section C), and the results of a similar scale (Section E) designed to measure dissatisfaction with each of the ten job aspects.

The following were the steps in the



TABLE 2

RANK ORDERS AND RANK DIFFERENCES OF PAIRED-COMPARISONS SCALE VALUES OF IMPORTANCE AND OF DISSATISFACTION, FOR TEN SPECIFIC JOB ASPECTS

Job Factor	Rank Order		Diff.
	Importance	Dissatisfaction	
Job security (10)	1.0	4.0	3.0
Physical working conditions (3)	2.0	2.0	0.0
Company's attitude toward employees (9)	3.0	6.0	3.0
Amount of pay received (7)	4.0	1.0	3.0
Temperament of immediate supervisor (8)	5.0	5.0	0.0
Opportunities for advancement (1)	6.0	3.0	3.0
The way informed of job performance (5)	7.0	7.0	0.0
Company's reputation with the public (2)	8.0	8.0	0.0
Employee eating facilities (6)	9.0	9.0	0.0
Knowledge of company's finances (4)	10.0	10.0	0.0

Rho = .781.

## statistical procedure:

a. Scale values of importance were computed from the data from Section C of the questionnaire. These computations were performed by the method suggested by Guilford (5).

b. Scale values of dissatisfaction were computed from the data in Section E by the method suggested by Guilford (5).

c. The ten job aspects were arranged in order from high to low on the basis of scale values of importance, and then on the basis of scale values of dissatisfaction. This permitted the computation of a rank-order correlation (5).

d. Pearson product-moment coefficients of correlation were computed to determine the relationship between the total number of times

each factor was chosen on the paired-comparisons scale of importance and the total number of times chosen on the paired-comparisons scale of dissatisfaction. This was done for each job aspect. These coefficients of correlation were then averaged by the method suggested by Garrett (4).

## Results

The results of the statistical procedure are shown in Table 2 and Table 3. All coefficients of correlation, including the rank order ( $\rho = .781$ ), are significant at or beyond the 1 per cent level of confidence. The product-moment correlation coefficients ranged from .228 to .591 and averaged .448.

## Discussion

On the basis of the results in this study, the hypothesis that there is a positive relationship between the relative amount of importance attached to a given job aspect and the relative amount of dissatisfaction felt toward that job aspect is supported. The product-moment coefficients of correlation in Table 3 are considered to be the most reliable indicators in this case. These were computed separately for each factor to avoid the effect which might result from variance among the job factors themselves.

TABLE 3

PRODUCT-MOMENT COEFFICIENTS OF CORRELATION OF THE FREQUENCY OF CHECKS ON THE SCALE OF IMPORTANCE WITH THE FREQUENCY OF CHECKS ON THE SCALE OF DISSATISFACTION ( $N = 310$ )

Job Factor	$r$
Opportunities for advancement	.591
Company's reputation with the public	.438
Physical working conditions	.415
Knowledge of company's financial status	.377
Way informed of job performance	.449
Employee eating facilities	.317
Amount of pay received	.547
Personality, temperament of immediate supervisor	.487
Company's general attitude toward employees	.228
Feeling of security offered by the job	.291
Average Coefficient of Correlation	.448

Although these coefficients were averaged, it was not necessary to base any final conclusions upon this average alone; hence, any controversy as to the validity of averaging coefficients of correlation is avoided.

One of the most valid indications that the hypothesis of the study is tenable is found in the importance and dissatisfaction levels of the job aspect, physical working conditions. In practically all the other studies reviewed, physical working conditions ranked at or near the bottom of the scale of relative importance. It seems significant that in this study the physical working conditions of the job were ranked as being second in importance only to the security offered by the job. This factor also ranked second in degree of dissatisfaction (Table a). It can be safely hypothesized that if working conditions were improved, the employees would soon become accustomed to the changes, and other aspects of the job would become more important to them.

### Conclusions

Statistical analysis and interpretation of results support the hypothesis that there is a positive relationship between the degree of dissatisfaction felt toward a specific aspect of a job and the amount of importance attached to that job aspect by the employee.

### V. PROBLEM III: EXTREMENESS OF ATTITUDE AND THE VARIABILITY OF RESPONSE

As early as 1925, Allport and Hartman (1) performed a study which illustrated that there is a relationship between the extremeness of attitudes and the degree of intensity with which they are held by an individual. In addition, studies such as those of Katz (12) and of Cantril (2), imply that the more intensely an attitude is held by an individual, the greater will be the consistency of responses of the holder of the attitude in situations which are in some way related to the given attitude. The objective of the present investigation is

to apply the above findings to situations which involve a man's attitude toward his job.

In the present study it is hypothesized that the more extreme an individual's over-all attitude (either favorable or unfavorable) toward his job becomes, the more consistent will be his responses toward specific aspects related to his job. This hypothesis is based on the theory that an attitude is a general frame of reference which affects the behavior of its holder in a variety of related situations (14).

### Statistical Procedure

The data available included expressions of over-all job attitude by 310 subjects (Section A of questionnaire). In addition, each subject had rated his degree of satisfaction or dissatisfaction with each of ten job aspects or factors (Section B). Expressions of satisfaction with the job in general as well as with the specific job aspects were on nine-point scales (Scale I and Scale II). Each point on each scale was assigned a numerical value corresponding to its position. For example, *Completely Satisfied* was assigned the numerical value of 1, *Balanced Feelings*, 5, and *Extremely Dissatisfied*, 9.

The first step in the statistical procedure was to divide the 310 subjects into five groups on the basis of their over-all job attitudes. The composition of the groups was as follows: Group I contained all cases in which the employee rated his over-all job attitude as *Completely Satisfied* or *Very Satisfied* (1 or 2 on Scale I); Group II contained all cases rating their attitude as *Quite Satisfied* or *Fairly Satisfied* (3 or 4 on Scale I); Group III, all cases with *Balanced Feelings* (5 on the scale); Group IV, all cases *Slightly Dissatisfied* or *Quite*

TABLE 4  
AVERAGE VARIANCES OF SUBJECTS GROUPED  
ACCORDING TO RATINGS OF OVER-ALL  
JOB SATISFACTION

Group	No. of Cases	Average Variance
I	72	27.37
II	159	32.63
III	37	45.68
IV	22	49.73
V	20	56.15

Group I—Completely Satisfied, Very Satisfied (1 or 2)  
Group II—Quite Satisfied, Fairly Satisfied (3 or 4)  
Group III—Balanced Feelings (5)  
Group IV—Slightly Dissatisfied, Quite Dissatisfied (6 or 7)  
Group V—Very Dissatisfied, Extremely Dissatisfied (8 or 9)

Dissatisfied (6 or 7); Group V, all cases Very Dissatisfied or Extremely Dissatisfied (8 or 9). The number of cases in each group was 72, 159, 37, 22, and 20 respectively.

The variances for the numerical values of each subject's ratings of satisfaction with the specific job aspects were computed. The variances were then averaged for all members in each of the five groups. The average variances for the groups were as follows: Group I, 27.37; Group II, 32.63; Group III, 45.68; Group IV, 49.73; and Group V, 56.15. These results are summarized in Table 4.

#### Discussion

The results of this study indicate that there is a constant and fairly regular increase in variability of response to specific job factors as over-all job attitude moves from *Complete Dissatisfaction* in the direction of *Extreme Dissatisfaction*. It was found that persons who indicated that they were "completely satisfied" with their jobs varied relatively little in their expression of satisfaction or dissatisfaction with specific job factors. The individual who ex-

pressed extreme dissatisfaction with his job tended to show greater variation in the attitudes he expressed toward specific aspects of his job.

#### Conclusions

The empirical hypothesis of the present study is not supported. It was predicted that as the over-all attitude toward the job becomes more extreme either toward the satisfied or the dissatisfied end of the continuum, the variability of expressions of satisfaction with specific aspects of the job would decrease. The results indicate that as an individual becomes more dissatisfied with his job he may be expected to show less consistency in his expressions of satisfaction or dissatisfaction with the specific aspects such as pay, supervision, chances to "get ahead," etc. One possible explanation of these results might be that, in terms of the propositions of Hull (11), satisfaction, i.e., need gratification, represents the lowest degree of drive, and that there is a constant increase in drive strength as need frustration or deprivation increases. The present results might then be expected. It may be that, as dissatisfaction increases, there is a corresponding increase in drive strength, and this increase results in an increased tendency to make finer discriminations on judgments concerning the job. On the other hand, the person who is completely satisfied with his job may not be highly motivated enough to make close or highly critical discriminations about the specific factors of his job. Since his over-all attitude is one of satisfaction, he does not bother to complain about specific factors even though they may not be as favorable as could be expected. The results of this study, along with those of studies such as that of Weitz (33), in-

dedicate that in future research increased attention should be given to the individual and his personal make-up.

#### VI. SUMMARY

The present research project dealt with three separate but related aspects of job attitude and attitude measurement. Three hundred and ten regular full-time employees of a large metropolitan department store served as subjects. The data were secured by means of a job satisfaction questionnaire constructed for the purpose.

In Problem I an attempt was made to improve prediction of job attitudes by including importance values with the measurements of satisfaction felt toward the specific aspects of the job. The hypothesis was that a combination of measures of attitude toward these aspects in which the specific attitudes had been weighted according to their importance to the employee would be a closer estimate of the general over-all attitude than if the specific attitudes were combined without regard to their importance. Under the conditions of the present investigation, the hypothesis is not supported. No significant differences were found between the measures of relationship between ratings of over-all satisfaction and averages weighted by importance values and the relationship found for unweighted averages of the ratings of satisfaction with the specific job aspects.

Problem II was designed to determine the relationship between the degree of importance attached to the various aspects of the job by the employees and the degree of dissatisfaction felt toward each of these job aspects. From the results of the study it was concluded that the hypothesis that there is a significant positive relationship between the amount

of importance attached to a given job aspect and the amount of dissatisfaction felt toward that factor is supported.

The objective in Problem III was to study the effect which the general over-all attitude toward the job may have upon the judgments or ratings of satisfaction with the specific aspects of the job. The hypothesis was that, as the general attitude becomes more extreme toward either the satisfied or the dissatisfied end of the continuum, the variability of ratings of satisfaction with the specific job aspects would decrease. The results of the study indicated that there is, on the average, a constant and fairly regular increase in variability as the over-all attitude moves from satisfaction toward extreme dissatisfaction. The individual who is highly dissatisfied tends to show a high degree of discrimination in evaluating the various aspects of his job.

#### VII. IMPLICATIONS FOR INDUSTRIAL APPLICATION

1. Future research is needed on the validation of attitude survey scores. Behavioral prediction is necessary before management can make the best use of attitude survey results.

2. Employees show the greatest concern about factors with which they are dissatisfied at a given time. Employers would do well to deal first with job aspects with which the most dissatisfaction is indicated. This will be the best indication of sincerity on their part.

3. Attitude surveys will probably be more useful in revealing dissatisfactions than in evaluating actions or programs which should be continued. In addition, it may be that management can expect to get the most reliable information concerning situations among their workers from the dissatisfied employees.

## BIBLIOGRAPHY

1. ALLPORT, F. H. & HARTMAN, D. A. The measurement and motivation of a typical opinion in a certain group. *Amer. J. polit. Sci. Rev.*, 1925, **19**, 735-760.
2. CANTRIL, H. The intensity of an attitude. *J. abnorm. soc. Psychol.*, 1946, **41**, 129-135.
3. FRIEND, JEANNETTE G., & HAGGARD, E. A. Work adjustment in relation to family background. *Appl. Psychol. Monogr.*, 1948, **150**, No. 16.
4. GARRETT, H. E. *Statistics in psychology and education*. New York: Longmans, Green, 1948.
5. GUILFORD, J. P. *Psychometric methods*. New York: McGraw-Hill, 1936.
6. HARRIS, S. Job attitudes of life insurance agents. *J. appl. Psychol.*, 1947, **31**, 111-128.
7. HARRIS, F. J. The quantification of an industrial morale survey. II. Application. *J. appl. Psychol.*, 1949, **33**, 112-113.
8. HOPPOCK, R. *Job satisfaction*. New York: Harper, 1935.
9. HOPPOCK, R., & ROBINSON, H. A. Job satisfaction researches of 1949. *Occupations*, 1950, **29**, 13-18.
10. HULL, C. L. *Principles of behavior*. New York: Appleton-Century, 1943.
11. JURGENSEN, C. E. What do job applicants want? *Personnel*, 1949, **25**, 352-355.
12. KATZ, D. The measurement of intensity. In H. Cantril, *Gauging public opinion*. Princeton: Princeton Univer. Press, 1944. Chap. 3.
13. KOLSTAD, A. Employee attitudes in a department store. *J. appl. Psychol.*, 1938, **22**, 470-479.
14. KRECH, D., & CRUTCHFIELD, R. S. *Theory and problems of social psychology*. New York: McGraw-Hill, 1948. Chap. 5, 6, 7.
15. LABOR RELATIONS INSTITUTE, New York. Do you know your workers' wants? *Foreman facts*, 1946, 3-4.
16. LIKERT, R. A technique for the measurement of attitudes. *Arch. Psychol.*, 1932, No. 140. Pp. 55.
17. LINDAHL, L. G. What makes a good job? *Personnel*, 1949, **25**, 263-266.
18. MCNEMAR, Q. *Psychological statistics*. New York: Wiley, 1949.
19. MAXCY, E. C. Understanding people in work relationships. *Personnel*, 1942, **18**, 371-376.
20. MAYO, E., & LOMBARD, G. F. F. Teamwork and labor turnover in the aircraft industry of Southern California. *Publ. Grad. Sch. Bus. Adm., Harvard Univer.*, 1944, **30**, No. 32.
21. NOLAND, E. W. An application of scaling to an industrial problem. *Amer. sociol. Rev.*, 1945, **10**, 631-642.
22. NOLAND, E. W. Worker attitudes and industrial absenteeism: a statistical appraisal. *Amer. sociol. Rev.*, 1945, **10**, 503-510.
23. RAUBE, S. A. Factors affecting employee morale. *Conference Bd. Rep., Personnel Policy*, 1947, No. 85. Pp. 35.
24. SEIDMAN, J. M. Dissatisfaction in work. *J. soc. Psychol.*, 1943, **17**, 93-97.
25. SEIDMAN, J. M., & WATSON, G. Satisfaction in work. *J. consult. Psychol.*, 1940, **4**, 117-120.
26. STAGNER, R. Psychological aspects of industrial conflict: I. Perception. *Personnel Psychol.*, 1948, **1**, 131-143.
27. STAGNER, R. Psychological aspects of industrial conflict: II. Motivation. *Personnel Psychol.*, 1950, **3**, 1-15.
28. STAGNER, R., FLEBBE, D. R. & WOOD, E. V. Working on the railroad—a study of job satisfaction. *Personnel Psychol.*, 1952, **5**, 293-306.
29. THURSTONE, L. L. Attitudes can be measured. *Amer. J. Sociol.*, 1928, **33**, 539-554.
30. THURSTONE, L. L. Theory of attitude measurement. *Psychol. Rev.*, 1926, **36**, 232-241.
31. WARREN, R., & MENDENHALL, R. M. *The Mendenhall-Warren-Hollerith correlation method*. New York: Columbia Univer. Statist. Bur., 1939. Document No. 1.
32. WATSON, G. Work satisfaction. In G. W. Hartmann and T. Newcomb (Eds.), *Industrial conflict: a psychological interpretation*. New York: Cordon, 1940.
33. WEITZ, J. A neglected concept in the study of job satisfaction. *Personnel Psychol.*, 1952, **5**, 201-205.
34. WOODS, W. A. Employee attitudes and their relation to morale. *J. appl. Psychol.*, 1944, **28**, 285-301.

(Accepted for publication March 31, 1955)



GEORGE BARTO PUBLISHING COMPANY, NEW YORK, N. Y.